

**Supplementary Table I.** Calculated enzyme kinetic values of wild-type AAG following ONOO<sup>-</sup> treatment, from Figure 2C (See Materials and Methods).

Wild-type AAG	$K_m$ (nM)	$V_{max}$ (mol <sup>16</sup> /min)	$V_{max}/K_m$ (mol <sup>16</sup> × min <sup>-1</sup> × nM <sup>-1</sup> )
Untreated Control	10.8 ± 1.0	6.58	0.61 ± 0.05
10 μM ONOO <sup>-</sup>	13.0 ± 1.6	5.9	0.45 ± 0.05
20 μM ONOO <sup>-</sup>	12.9 ± 0.7	4.4	0.34 ± 0.05
40 μM ONOO <sup>-</sup>	13.7 ± 1.4	4.0	0.29 ± 0.02